Email: joyashreeju@gmail.com. Mobile: +91 9836007382

EXPERTISE

Economics, Sustainable Development, Sustainability Transition

Economics (Micro Economics, Quantitative Techniques in Economics); Resource, Energy and Environmental Economics; Natural Resource Accounting; Economics of Climate Change; Research and Analysis, Training, Capacity Building.

Organisations and Management

New Teaching and Research Programme: Planning, Development and Implementation, Proposal writing for Fund raising, coordination, Project and Research Management.

International Professional Experience

US, Europe, Asia, Africa, South Asia, Asia-Pacific: multiple times travelled in multiple countries with variety of assignments. Comfortable in working in multicultural ambience.

DATE OF BIRTH AND GENDER: OCTOBER 1, 1957. FEMALE

PROFESSIONAL EXPERIENCE

Jadavpur University, Kolkata, India

2002-Present: Professor of Economics

2014-2015: ICSSR National Fellow -affiliated to Jadavpur University

2006-08: Head of the Department of Economics

1991-2002: Senior Lecturer and Reader in Economics

Responsible for teaching courses for doctoral, masters and Undergraduate students and provide Research Guidance.

2001-Present: Coordinator, Global Change Programme, Initiated and Coordinating the Climate Change and Human Dimensions Research across faculties within the university. Responsibilities are:

- Managing the research programme to provide knowledge support to (e.g.) Government of India , GEA, IPCC, Stern Review Report.
- Conducting training workshops for policy makers, company executives, climate smart entrepreneurs, climate champions, NGOs
- Developing research collaborations across countries on a single theme.
- Facilitating and organizing international research networks
- Fund raising from multiple sources to facilitate research activities (Government of India: various ministries, APN, SANDEE, ADB, Climate Strategies-UK)
- Organising knowledge dissemination workshop

2003-Present: SYLFF (Rioyichi Sasakawa Young Leaders Fellowship Fund) Project Director of the Research and Leadership Development Programme. Initially wrote the proposal in collaboration with faculty members within Jadavpur University on "Tradition, Social Change and Sustainable Development: A Holistic Approach" to competitively win an endowment of 1 million USD for the university from Nippon Foundation, Japan. Responsibilities are:

- Overall administration of the project including directing academic, administrative and financial management
- Networking with the 68 institutions worldwide towards enhancement of exchange among students, faculties and administrators.
- Coordination among multiple disciplines within social sciences, multiple stakeholders: funding agency in Japan, university administration, students, research advisors and Mentors.
- Organisation of research progress report workshops/regional researchers' forum etc.

Muralidhar Girls' College, Kolkata, India.

1982-1991: Lecturer, Teaching at Undergraduate level

EDUCATION

• Ph.D in Economics, Jadavpur University, Kolkata, India, 1991.

Concentration: Econometric Modelling of Producer Behaviour for Indian Industries to understand Demand for Energy.

- Master of Arts. (Economics), North Eastern Hill University, Shillong, India, 1978.
- College (Bachelor of Arts (Economics Honours) and PUC)): Lady Keane Girls College, Shillong.
- School (high school): Government Girls' High School Shillong.

1978-1982: For short period after masters degree completion worked for a research project in NEHU, Shillong. In 1979 Migrated to Kolkata and took some time to get settled and search for job and research opportunity in new city. So contacts started building up from end of 1979 and started research work from 1980.

OTHER TRAINING

- One week Summer School on Economic Theory, Presidency College, Calcutta, India, 1984.
- Auditing of Courses on Environmental Economics, Resource Economics, Applied Economics in the Department of Agriculture and Resource Economics, (ARE) and Energy Resource Group (ERG) Berkeley, USA, 1997-98 as Ford Foundation Post Doctoral Fellow.
- Six weeks' faculty improvement programme in Environmental Economics under World Bank capacity building programme in Environmental economics at Institute of Economic Growth, Delhi, India, 1998.
- Three weeks' training programme for Computable General equilibrium Model organized by SANDEE, south Asian Network for Development and Environmental Economics, Bangkok. 2002.

AWARDS AND HONOURS

- **2016** *June* .*TEDxGhent Talk* : http://www.tedxghent.be/home/events/tedxghent-6-bits-love/ (https://www.youtube.com/watch?v=EQ56sFXpHb8)
- 2014: Indo-US S&T Forum, Joint Awardee for business plan on "Commercializing a Scalable Low –cost Arsenic remediation technology for societal impact."
- 2014: Senior Fellow, Breakthrough Institute, USA
- **2013:** National Fellowship of the Council in the Social Sciences for pre-eminent scholarship offered by Indian Council of Social Sciences Research (ICSSR), Ministry of Human Resource Development, Government of India.
- 2012: Creativity Prize: A member of the 'Team led by Prof. Ashok Gadgil'- winner of the 5th Prince Sultan Bin Abdulaziz International Prize for Water. http://psipw.org/index.php?option=com_content&view=article&id=320&Itemid=284 http://psipw.org/index.php?option=com_content&view=article&id=319:prize-council-announces-winners-for-the-5th-award&catid=2:news-a-events&Itemid=26
- 2011: Best Citizen's Award 2011, Friendship Society of India
- 2011: Sawamsiddha Award of Rotary Club of Calcutta Metro City 2011.
- **2008**: Felicitated and awarded a certificate by Prime Minister of India for valuable contribution to the IPCC process (AR4).
- **2008**: Jadavpur University Teachers Association felicitated for *noteworthy achievements* in the field of her research. (2008).
- 2007: Nobel Peace Prize: Among the network of scientists who shared in 2007 Nobel Peace Prize awarded to IPCC. Served as Coordinating Lead author of industry chapter of WGIII of AR4 and AR5. IPCC shares the Nobel Peace Prize of 2007.
- 1998: NIPFP-Ford Foundation Follow up Post-Doctoral Research grant (in Economics) in 1998-99.
- 1997: Ford Foundation Post Doctoral Fellowship Award in Environmental Economics. Spent the year at Lawrence Berkeley National Library, Environmental Energy Technology Division, and MS 90-4000, One Cyclotron Road, Berkeley, CA 94720, USA (1997-98).

ADVISORY ACTIVITY

- Governing Body Member Vice President SaciWATERs, www.saciwaters.org
- Member of *Standing Committee on Industrial Statistics (SCIS*), National Statistical Commission, Government of India , Ministry of Statistics and Programme Implementation.
- Chairperson, Environmental Statistics for Indian Industries, CSO, Government of India, Ministry of Statistics and Programme Implementation.
- TIFAC. National Committee, Government of India.
- Member of the Statutory Body (terms completed): SEAC- State Level Environment Assessment Committee of the Govt. of West Bengal, Central Electricity Regulatory Commission, New Delhi, India, Climate Change consultative group for equity at MOEF, GoI., Member Executive Council (Chancellor's Nominee): Vidyasagar University

- UGC:
 - Expert Committee for Minor and Major Research projects in Economics
 - Expert Committee Member of SAP/DRS/CAS in Economics
- National Institute of Technology: Governing Body member of VNIT
- Member of doctoral committees/faculty selection committees in universities (India and overseas), IITs, IISC, ICSSR centre, State and Central Universities .
- Honorary Fellow:
 - Senior Fellow with the Breakthrough Institute, USA
- Steering/Advisory Committee Member :
 - LOICZ, (Land Ocean Interaction Coastal Zone) Global Network. (completed the term)
 - SAARC Climate Change Committee (past)
 - UCCRN (Urban Climate Change Research Network), coordinated by Columbia University, USA (Past)
 - DIL, Development Impact Laboratory, UCB and LBNL, USA
 - LIGTT, UCB and LBNL, USA
 - Climate Strategies, UK (Past)
 - Environmental Progress (Past)
- Editorial Board Member of international journals
 - Current Opinion in Environmental Sustainability
 - Environmental Development
 - Energy Economics (completed the term)

LIST OF ALL PUBLICATIONS

h-index:

11 (SCOPUS); as on April 2016 (The h Index considers Scopus articles published after 1995.) http://www.scopus.com/authid/detail.url?authorld=7202869544

18 (Google Scholar) as on October, 2016

Citations: 1840

i10-Index: 34

Books/Articles/Reports:

- A. Books authored/Coauthored/Edited/Chapter author/Guest Editor of Journal
- i. Authored/Coauthored:

2016

Das, A., Joyashree Roy, S, Chakraborti (2016), Socio-Economic Analysis of Arsenic Contamination of Groundwater in West Bengal, DOI 10.1007/978-981-10-0682-1, Print ISBN 978-981-10-0680-7, Online ISBN 978-981-10-0682-1, Series ISSN 2198-0012, Springer Singapore.

2015 Das, A., Joyashree Roy (2015), "Jole Arsenic: Prasanga Paschimbanga", Mitram, Kolkata, ISBN: 93-80036-68-x.[Arsenic in Water: Context West Bengal]

2014

- i. Pal, B.D., V.P. Ojha., S, Pohit., **J.Roy (2014)**, GHG Emissions and Economic Growth-A Computable General Equilibrium Model Based Analysis for India, Springer. New Delhi. ISBN 978-81-322-1942-2.
- ii. Fischedick, M., J. Roy, A. Abdel-Aziz, A. Acquaye, J.M. Allwood, J.-P. Ceron, Y. Geng, H. Kheshgi, A. Lanza, D. Perczyk, L. Price, E. Santalla, C. Sheinbaum, and K. Tanaka (2014). Industry. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

2012

- i. IPCC Report (contributing author): IPCC 2012, Renewable Energy sources and Climate Change Mitigation, Special Report of the IPCC, Cambridge University Press. US.
- ii. UNIDO Industrial Development Report 2011: (coauthor)

 http://www.unido.org/fileadmin/user_media/Publications/IDR/2011/UNIDO%20IDR%20reprint%20for%20web%20020912.pdf
- *iii.* Chapter 21 –Lifestyles and Human wellbeing, convening lead author. 2012. Global Energy Assessment: Towards a Sustainable Future –<u>Edited</u>: *Johansson T et al* (2012). *CUP*

2009

a. Jana S, J Roy, S. Datta. (2009), Industrial Pollution and Abatement, Economic Analysis of Paper Units of West Bengal, South Asian Publishers Pvt. Ltd, New Delhi.

2007

<u>IPCC Chapter Co-Author:</u> IPCC 2007: Climate Change Mitigation, Contribution of Working Group III to the Fourth Assessment Report of the IPCC. Bernstein Lenny and J Roy Coordinating Lead authors of Chapter 7: "Industry", IPCC Fourth Assessment Report, Working Group III. Cambridge University Press, UK and NY.

<u>IPCC Report Drafting Author:</u> IPCC 2007: Summary for Policy makers. In Climate Change Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the IPCC (B. Metz, O.R. Davidson, P.R Bosch, R Dave, L.A Meyers (eds), Cambridge University Press, UK and NY.

"An Analysis of the Performance of the States and Union Territories of India on the Sustainable Development Pathway"- Summary Report, 2007, Global Change

Programme, Jadavpur University, Kolkata, India (coauthored by Bikram Chatterjee, S Basak and K Nandy).

2006

"Development Challenges: Some Analytical Issues", Allied Publishers Ltd. 2006, Kolkata: 700 032 (co-editor, Ajitava Raychaudhuri). 2006

2000

"Themes on Development Economics", Allied Publishers Ltd. 2000, Allied Publishers Ltd., Calcutta 700 032 (co- editor, Manas Ranjan Gupta).

1999

"Environmental Economics in India- Concepts and Problems", 1999, Allied Publishers Ltd., Calcutta 700 032. (co-editor, Gautam Gupta).

1992

"Demand for Energy in Indian Industries (A Quantitative Approach)", 1992, Daya Publishing House, Delhi 110 006.

B. Journal (guest) editor:

i) Guest Editor of: *Special Issue on Energy Systems* of Current Opinion in Environmental Sustainability 2013, 5. (Co editors: S. K. Ribeiro, Diana Urge-Vorsatz, Maria Josefina Figueroa).

C. Articles in Books and Journals:

Papers in Peer Reviewed Journals/Books of International Repute: (96)

2016 (7)

- Dasgupta Shyamasree and **Joyashree Roy** (2016), Analysing energy intensity trends and decoupling of growth from energy use in Indian manufacturing industries during 1973-74 to 2011-12, *Energy Efficiency*, pp 1-19, doi:10.1007/s12053-016-9497-9.
- Sarah Colenbrander, Andy Gouldson, **Joyashree Roy**, Niall Kerr, Sayantan Sarkar, Stephen Hall, Andrew Sudmant, Amrita Ghatak, Debalina Chakravarty, Diya Gangulyand Faye McAnulla (2016). Can low-carbon urban development be pro-poor? The case of Kolkata, India, *Environment and Urbanization*, pp 1–20. DOI: 10.1177/0956247816677775.
- Roy Joyashree, Diya Ganguly, Debalina Chakravarty (2016), Low Carbon Green Growth Strategies and Sustainable Development for Mega cities: A Case Study of Kolkata, Amity Journal of Economics 1 (1), pp 73-86. www.amity.edu/admaa/ajeco

- Chakravarty D, Roy J(2016), The Global South: New Estimates and Insights from Urban India. In the edited volume of "Rethinking Climate and Energy Policies: New Perspectives on the Rebound Phenomenon", edited by Tilman Santarius, Hans Jakob Walnum, Carlo Aall. Springer International Publishing, Switzerland.2016. ISBN 978-3-319-38805-2, ISBN 978-3-319-38807-6 (eBook), DOI 10.1007/978-3-319-38807-6.
- Duke Ghosh, Frans Sengers, Anna J. Wieczorek, Bipashyee Ghosh, Joyashree Roy, and Rob Raven (2016), Urban Mobility Experiments in India and Thailand, in The Experimental City ed. by James Evans, Andrew Karvonen, Rob Raven, Routledge. https://www.routledge.com/The-Experimental-City/Evans-Karvonen-Raven/p/book/9781138856202
- Roy, J, S. Datta, P. Kapuria, I. Guha, R. Banerji, S. Rao, M. G. Miah, M. R. Islam, S. Chen, H, Li, T. Xia, J. Ratnasir, P. B. T. P. Kumara, C. S. Lokuhetti, & S. P. Vidanage (2016), Coastal Ecosystem and Changing Economic Activities and Vulnerabilities along Chinese and South Asian Coasts, APN Science Bulletin, Issue 6, April, pp 21-26.
- Roy Joyashree, K Mukhopadhyay, D. Ghosh, A Ghosh (2016), Exacerbating Health Risks in India due to Climate Change: Rethinking Approach to Health Service Provision, In book: Handbook of Research on Climate Change Impact on Health and Environmental Sustainability, Edition: first, Chapter: 1, Publisher: IGI Global, Editor: Soumyananda Dinda, pp.1-25, DOI: 10.4018/978-1-4666-8814-8.ch001

2015 (5)

- Chakraborty, D; and Joyashree Roy (2015), Ecological Footprint of Paperboard and Paper production Unit in India. Environment Development and Sustainability 17(4):909-921.
- Dasgupta S; **Roy Joyashree** (2015), Understanding technological progress and input price as drivers of energy demand in manufacturing industries in India, *Energy Policy* 83, 1-13.
- Dasgupta S; Roy Joyashree, (2015), Designing PAT as a Climate Policy in India: Issues Learnt from EU-ETS, In book: Nature, Economy and Society: Understanding the Linkages, Chapter: 16, Publisher: Springer, Editors: Nilanjan Ghosh, Pranab Mukhopadhyay, Amita Shah, Manoj Panda, pp.315-328, DOI: 10.1007/978-81-322-2404-4.
- Christoph von Stechow, David McCollum, Keywan Riahi, Jan C. Minx, Elmar Kriegler, Detlef P. van Vuuren, Jessica Jewell, Carmenza Robledo-Abad, Edgar Hertwich, Massimo Tavoni, Sevastianos Mirasgedis, Oliver Lah, Joyashree Roy, Yacob Mulugetta, Navroz K. Dubash, Johannes Bollen, Diana U rge-Vorsatz, 19 and Ottmar Edenhofer (2015), Integrating Global Climate Change Mitigation Goals with Other Sustainability Objectives: A Synthesis, Annual Review of Environment and Resources 40(1) November
- Roy Joyashree (2015), Climate policy rather than politics should be the result, commentary, Environmental Development, February 2015. Accepted manuscript availableonline: 24-FEB-2015, DOI information: 10.1016/j.envdev.2015.02.003

- Roy, Joyashree; Rupsa Bhowmick; Manisha Dolui (2014), Actions for Sustainable Development: Evidence Based Assessment for the State of West Bengal, *Arthaniti* 13 (1-2)/2014.
- Roy Joyashree, S Dasgupta (2014), Indian Industries doing their bit to go green http://indiaclimatedialogue.net/2014/08/29/indianindustriesbitgogreen/
- Jana Sebak, **Joyashree Roy**, Buddhi Marambe, Jeevika Weerahewa, Gamini Pushpakumara, Pradeepa Silva, MD. Giashuddin Miah, Ranjith Punyawardena, Sarath Premalal (2014), Home Gardens in the Paschim Medinipur District of West Bengal in India: A Land Use System with Multiple Benefits. *Int. J. of Environment and Sustainable Development*, 14(2):191-206 DOI: 10.1504/IJESD.2015.0686066
- Roy, Joyashree; Rupsa Bhowmick; Manisha Dolui (2014), Sustainable Development in India: Updates on Possible Role of States.
 http://www.indiastat.com/article/70/Joyashree/article70.html
- Susan E. Amrose, Siva R.S. Bandaru, Caroline Delaire, Case M. van Genuchten, Amit Dutta, Anupam DebSarkar, Christopher Orr, Joyashree Roy, Abhijit Das, Ashok J. Gadgil (2014), Electro-chemical arsenic remediation: Field trials in West Bengal, Science of the Total Environment 488–489 (2014) 539–546.

2013 (9)

- Das. A, Joyashree Roy, 2013. Socio-Economic Fallout of Arsenicosis in West Bengal: A
 Case Study in Murshidabad District . http://isas.org.in/jisas/jsp/volume/vol67/issue2/08%20-%20Joyashree%20Roy.pdf
 Journal of the Indian Society of Agricultural Statistics, 67(2). pp 273-285.
- Roy. Joyashree . 2013. Environmental Development , Artha Beekshan vol 22.No 1, June.
- Das., S, S.S. Das, P. Ghosh, S. Pal, A. Dixit, **J Roy**. 2013. Fast Food Choice: What Matters in Indian Megacity, Kolkata. Artha Beekshan vol 22.No 1, June.
- Chakraborty D, **Roy J.** 2013. Corporate Carbon Footprint Accounting: Estimating Carbon Footprint of an Indian Paperboard and Paper Production Unit. *International Journal of Business Insights and Transformation*, 6(1):18-26
- Roy., Joyashree, D. Ghosh, A. Ghosh & S. Dasgupta. Fiscal Instruments: Crucial Role in Financing Low Carbon Transition in Energy System. *Current Opinion in Environmental Sustainability*. 10.1016/j.cosust.2013.05.003
- Chakravarty Debalina, S Dasgupta, J Roy (2013). "Rebound effect: how much to worry?" Current Opinion in Environmental Sustainability 2013, 5. DOI No. 10.1016/j.cosust.2013.03.001
- Chakraborty Debrupa, **J Roy**. (2013)"Energy and Carbon Footprint: Numbers Matter in Low Energy and Low Carbon Choices". Current Opinion in Environmental Sustainability 2013, 5. DOI No. 10.1016/j.cosust.2013.04.001
- Roy Joyashree, Shyamasree Dasgupta, Debalina Chakravarty. (2013). Energy Efficiency: Technology, Behavior and Development in Andreas Goldthau (Ed.) The Handbook of Global Energy Policy. 2013 (First Edition, pp. 282-302) Wiley-Blackwell (ISBN: 978-0-470-67264-8).
- Roy Joyashree, Kapuria Preeti, Datta Satabdi, Guja Indrila, Banerji Rajarshi, Rao Sandhya, iah, Giasuddin; Chen, Shang; Li, Jingmei; Xia, Tao; Ratnasiri, Janaka; P.B.

Terney Pradeep Kumara; Lokuhetti, Chinthaka S.et al. (2013). Coastal Ecosystems and Changing Economic Activities: Challenges for Sustainability Transition along Chinese and South Asian Coasts. *APN Science Bulletin* (Asia Pacific Network for Global Change Research) March 2013, no. 3.

2012 (8)

- C Daulagala, J Weerahewa, B Marambe, G Pushpakumara, P Silva, R Punyawardena, S Premalal, G Miah, J Roy, S Jana (2012), Socio Economic Characteristics of Farmers Influencing Adaptation to Climate Change: Empirical Results from Selected Homegardens in South Asia with Emphasis on Commercial Orientation. Srilanka Journal of Advanced Social Studies. Vol 2, no 2, pp.71-90.
 http://www.sljol.info/index.php/SUASS/issue/view/590
- Chakraborty, D., **Roy**, **J.**(2012). Accounting for Corporate Water Use: Estimating Water Footprint of an Indian Paper Production Unit. *Journal of Indian Accounting Review*, 16 (2), 34 42.
- Halsnæs, Kirsten, Amit Garg, John Christensen, Helene Ystanes Føyn, Maryna Karavai, Emilio La Rovere & Matthew Bramley & Xianli Zhu, Catherine Mitchell, Joyashree Roy, Kanako Tanaka, Hidefumi Katayama, Carlos Mena, Imoh Obioh, Igor Bashmakov, Stanford Mwakasonda, Myong-Kyoon Lee, Marlene Vinluan & Yu Joe Huang, Laura Segafredo (2012), "Climate change mitigation policy paradigms—national objectives and alignments", Mitig Adapt Strateg Glob Change DOI 10.1007/s11027-012-9426-y.
- Gadgil, A, **Joyashree Roy**, S Addy, A Das, Sarah Miller, A Dutta, A Deb Sarkar (2012), "Addressing Arsenic Poisoning in South Asia", *Solutions*, Sept-Oct, Vol 3, Issue 5. http://thesolutionsjournal.anu.edu.au/node/1156
- **Roy, Joyashree**, Maniparna Shyam Roy, and Abhinanda Deb (2012), "Sustainable Development: An Assessment for Paschimbanga." In *Indian Economic Development: Contemporary Issues*, edited by D N Bhattacharyya, 14-49. New Delhi: Regal Publications.
- Dasgupta Shyamasree, Joyashree Roy, Amit Bera, Asha Sharma, Pushkar Pandey (2012), Growth Accounting for Six Energy Intensive Industries in India., Journal of Industrial Statistics, Central Statistical Organization (IS Wing), Ministry of Statistics and Programme Implementation. Government of India, Vol. 1 No 1. March pp 1-15.
- Pal Barun , Sanjib Pohit , **Joyashree Roy** (2012), Social accounting martrix for India, Economic Systems Research, Volume: 24, Issue: 01, pages 77 99. http://dx.doi.org/10.1080/09535314.2011.618824
- Weerahewa Jeevika, Gamini Pushpakumara, Pradeepa Silva, Chathuranga Daulagala, Ranjith Punyawardena, Sarath Premalal, Giashuddin Miah, Joyashree Roy, Sebak Jana and Buddhi Marambe (2012), Are Homegarden Ecosystems Resilient to Climatic Change? An Analysis of Adaptation Strategies of Homegardeners in Sri Lanka. APN Science Bulletin., 2: 22-27. ISSN 2185-761x . http://www.apn-gcr.org/uploads/bulletin/ScienceBulletin_Issue2_March2012_web.pdf.

2011 (2)

 Jayant Sathaye, Oswaldo Lucon, Atiq Rahman, John Christensen, Fatima Denton, Junichi Fujino, Garvin Heath, Monirul Mirza, Hugh Rudnick, August Schlaepfer, Andrey Shmakin, Gerhard Angerer, Christian Bauer, Morgan Bazilian, Robert J Brecha, Peter Burgherr, Leon Clarke, Felix Creutzig, James Edmonds, Christian Hagelüken, Gerrit Hansen, Nathan Hultman, Michael Jakob, Susanne Kadner, Manfred Lenzen, Jordan Macknick, Eric Masanet, Yu Nagai, Anne Olhoff, Karen Olsen, Michael Pahle, Ari Rabl, Richard Richels, **Joyashree Roy**, Tormod Schei, Christoph von Stechow, Jan Steckel, Ethan Warner, Tom Wilbanks, Yimin Zhang, (2011), Chapter in Renewable Energy Sources and Climate Change Mitigation, CUP, UK.

Roy Joyashree, Moumita Roy and Shreya Roychowdhury (2011); "Sectoral Approach
for Negotiating Climate Change: What is in it for the Indian Economy?"; pp: 265-284;
Published in *Environment and Sustainable Development* edited by Raj Kumar Sen, Deep
& Deep publications Pvt. Ltd., New Delhi, India

2010 (4)

- Roy Joyashree and S Dasgupta (2010), The Economics of Nuclear Energy: revisiting Resurrection, Artha Beekshan Vol 19, No 1, June.
- Roy J (2010), Iron and steel Sectoral Approaches to the Mitigation of Climate Change, Perform, achieve and Trade (PAT in India)Climate Strategies Briefing paper september 23, www.climatestrategies.org
- Roy Joyashree, Chhonda Bose, Ranjan Bose, Sarmistha Das, Shobhankar Dhakal, Mitali Dasgupta, Rucha Ghate, Saikat Sinha Roy, Manaswita Konar, Anoja Wickramasinghe, Moumita Roy & Chetana Chaudhuri, (2010), "Development Pathway", in 'Global Environmental Changes in South Asia: A Regional Perspective', edited by A. P. Mitra & C. Sharma, published by Capital Publishing Company, New Delhi. ISBN 81-85589-73-9.
- Roy Joyashree, Moumita Roy (2010); "Sectoral Approach: what is in it for the Five Large Developing Countries?" pp: 18- 33 in *Climate Change, Society & Sustainable Development , Agenda for Action,* Published by: Bennett, Coleman & Co. Ltd., New Delhi, India; Marketed by: Times Groups Books;

2009 (8)

- Jana Sebak ; Joyashree Roy (2009), Marginal Abatement Cost Estimation for Pulp and paper industry in India. *ICFAI University Journal of Environmental Economics*, VII. No. 2 30-48.
- Roy Joyashree (2009) Climate Change and Gender: Challenges and Opportunities for Women's Rights Group, ARROWs for change, Vol 15. No . 1. P 5-6.
- Roy Joyashree and S. Fang (2009) Energy Intensive sectors and international trade:
 Possible sectoral agreements in Trade, Climate Change and Sustainable Development,
 key issues for small states, least developed countries and vulnerable economies. Ed
 MK Gueye, M Sell, J Strachan, Published by common wealth Secretariat, London, UK.
 Pp 131-147
- Roy Joyashree (2009), "Managing Environment: Time to Revisit Human Action", in Environmental Pollution on Biosphere and its Management, edited by: Debamitra Mitra & Arup Kumar Mitra, The Icfai University Press, pp: 60-69
- Roy Joyashree and S. Pal (2009), Lifestyle and climate Change: Link awaiting activation, Current Opinion in Environmental Sustainability, 1:192–200.

- Roy Joyashree (2009), Climate Change: International Negotiations and Mitigation Policy, in Edited Volume "Hand Book on Environmental Economics in India" ed: Kanchan Chopra and Vikram Dayal, OUP, New Delhi. Ch 10.
- Roy, J., Chatterjee, B., and Basak, S., (2009), "Sustainable Development in India? Who should do what, "http://www.indiastat.com/article1/01/drjoy/article1.html downloaded March 27. 2009. , http://www.indiastat.com/article/01/drjoy/fulltext.pdf
- Worrell Ernst, Lenny Bernstein, Joyashree Roy, Lynn Price, Jochen Harnisch, Stephane de la Rue du Can (2009), Industrial Energy Efficiency and Climate Change Mitigation, Energy Efficiency: Volume 2, Issue2, Page 109.

2008 (4)

- Roy Joyashree, Bikram chatterjee, Sruti Basak (2008), Towards a Composite Sustainability Index: How are the states and union territories of India doing? *The India Economy Review*, Vol V, September 30, pp 54-76. http://www.iipmthinktank.com/publications/archive/ier/IER-sept-08.pdf
- Roy Joyashree (2008), Climate Change Response and Action at Cross Roads: Time to Revisit Clean Development Mechanism. http://www.tokyofoundation.org/en/sylff/voices-from-the-sylff-community/climate-change-response-at-a-crossroads
- Roy Joyashree (2008), "An Incentive for Tackling Climate Change", Connecting, April -May 2008, British Council India.
- Roy Joyashree (2008), Economic Benefits of Arsenic Removal from Ground Water -A
 Case Study from West Bengal, India. Science of the Total Environment, (STOTEN), Vol
 397/1-3 pp 1-12.

2007 (3)

- Roy Joyashree (2007), "De-Linking Economic Growth From GHG Emissions Through Energy Efficiency Route- How far are we in India?", The Bulletin On Energy Efficiency. Vol.7 (Annual Issue 2007), pp 52-57.
- Roy Joyashree (2007), Climate Change in The South Asian Context with a Special focus on India: A Review, AEI Newsletter, April, Issue 3, pp 9-21.
- Roy Joyashree (2007). , Global Warming and Indian Sundarbans: Need for a Systems Approach, Hindu 2007 Survey on Environment.

2006 (5)

- Sanstad A.H., Joyashree Roy, Jayant A. Sathaye (2006), Estimating Energy Augmenting Technical Change in developing Country Industries, Energy Economics, Special Issue.
- Roy Joyashree , Alan H. Sanstad, Jayant A. Sathaye, Raman Khaddaria (2006), Substitution and Price Elasticity Estimates Using Inter-Country Pooled Data in a Translog Cost Model, Energy Economics, Special Issue.
- Ghosh Anupa and Joyashree Roy (2006) Coping with Extreme Climatic Events: Analysis of Household and Community Responses from Selected Hotspots in India, *Science and Culture*, Special Issue on Flood Disaster, Risk Reduction in Asia, Vol 72. No.1-2, January-February. pp 23-31.

- Jana Sebak and Joyashree Roy (2006), What Determines Pollution Abatement Effort: Formal or informal Regulation? Case of Pulp and Paper Industry, in West Bengal",in book edited by Joyashree Roy and A Roy Chaudhuri, : Development Challenges: Some Analytical Issues, Allied Publishers, Kolkata.
- Roy Joyashree , Anupa Ghosh and Gopa Barua (2006), The Economics of Climate Change: A Review of Studies in the Context of South Asia with a Special Focus on India. Submitted to Stern Review, http://www.hmtreasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

2005 (3)

- Ghosh Anupa and Joyashree Roy (2005), Synthesis Report on Floods and Droughts. *Science and Culture* Vol. 71. No. 7-8. pp 285-287.
- Roy Joyashree, Anupa Ghosh, Asis Majumdar, Pankaj Roy, A.P. Mitra, C. Sharma (2005), Socio-economic and Physical Perspectives of Water Related Vulnerability to Climate Change Results of
 - Physical Perspectives of Water Related Vulnerability to Climate Change: Results of Field Study in India, *Science and Culture*, Vol 71, No 7-8, pp 239-259.
- Roy Joyashree, Katja Schumacher, Jayant Sathaye, Alan Sanstad (2005), "Analysis of Fuel Input Use and Technical Change in Selected Energy-Intensive Industries in India" in *Resource Revisited* ed. Gautam Gupta, Allied Publishers Ltd., Kolkata.

2004 (2)

- Roy Joyashree, Subhorup Chattopadhyay, Sabyasachi Mukherjee, Manikarnika Kanjilala, Sreejata Samajpati, Sanghamitra Roy (2004), An economic Analysis of Demand for Water Quality: A Case from Kolkata City, Economic and Political Weekly, vol XXXIX No 2, January 10-16, pp 186-192.
- Spalding-Fecher R, J Roy, Y WANG, W LUTZ -Potential for Energy Efficiency: Developing Nations in Encyclopedia of Energy, 2004

2003 (2)

- Sathaye, J, Scott Murtishaw, Lynn Price, Maurice Lefranc, Joyashree Roy, Herald Winkler, Randall Spalding-Fecher (2003), Multiproject Baselines for Evaluation of Electric Power Projects, *Energey Policy*, Vol32/11 pp 1303-1317.
- Roy Joyashree and Das, S (2003) ,"Clean Development Mechanism, Options and Challenges for Indian Power Sector", in Environment and Human Security, ed. P. Bhattacharya and S. Hazra, Lancers Books, New Delhi.

2002 (2)

- Roy Joyashree, S Das, Jayant Sathaye, Lynn Price (2002), Estimating Baselines for CDM Case of Eastern Regional Power Grid in India. Environmental Economics and Policy Studies. Vol. 5, No. 2, pp. 121-134.
- Dasgupta Mitali and Joyashree Roy (2002), "Energy Consumption in India: an Indicator Analysis", Development Alternatives, October, pp 12-13.

2001 (2)

 Das Gupta M and Joyashree Roy (2001), "Understanding Changes in Energy Consumption by Energy Intensive Manufacturing Industries in India", Staff paper, CSO. Government of India. • Dasgupta, Mitali and Joyashree Roy (2001) Estimation and Analysis of Carbon dioxide Emissions from Energy Intensive Manufacturing Industries in India. International Journal of Energy, Environment and Economics Vol 11, no 3, pp165- 179.

2000 (2)

- Dasgupta, M and Joyashree Roy (2000), Manufacturing Energy Use in India: A
 Decomposition Analysis, Asian Journal of Energy and Environment, September, Vol 1,
 No 3. 223-247.
- Roy, Joyashree (2000), Rebound Effect: Some empirical evidence from India, *Energy Policy*, 28, pp433-438.

1999 (3)

- Roy, Joyashree, Jayant Sathaye, Alan Sanstad, Katja Schumacher, Puran Mongia (1999), Productivity Trends in Indian Energy Intensive Manufacturing Industries", Energy Journal, no 3, July: pp 33-61.
- Roy, Joyashree and Ranjana Mukhopadhyay (1999) "The Changing Structure of the Indian Economy -with Special Reference to Infrastructure and Energy Sectors-An Input-Output Analysis. *Journal of Applied Input- Output Analysis*, vol 5. pp 39-49.
- Ganguli S and Joyashree Roy (1999), "Water Pollution Abatement Cost and Tax in the Paper Industry", in Environmental Economics in India- Concepts and Problems, ed. G Gupta and Joyashree Roy, 1999, Allied Publishers Ltd., Calcutta 700 032.

1998 (3)

- Ghosh, S and Joyashree Roy (1998) "Qualitative Input-Output Analysis of the Indian Economic Structure", *Economic Systems Research* vol. 10 no. 3.pp 263-273.
- Roy Joyashree and S.Jana (1998) "Solar Lanterns for Rural Households", Energy-the International Journal, vol.23, no.1, pp 67-68.
- Roy Joyashree (1997) "Socio economic Evaluation of the Solar Lantern Programme in rural India", SESI Journal.

1997 (1)

• S Bandopadhyay and Joyashree Roy (1997) "Logit Analysis of Private Demand for Elementary Education in India – A case Study Using Household Survey Data", *Margin*, oct- dec.

1996 (1)

• Roy Joyashree and S. Gupta (1996), "Cost of Oil Based Decentralised Power Generation in India - Scope for SPV Technology", *Solar Energy*, vol.57, No 3:pp 231-237.

1995 (4)

- Roy Joyashree (1995), "Back up Power Generation in Calcutta Metropolitan Agglomeration", Energy Management, Oct-Dec. pp.3-7.
- Sarkar, S. and Joyashree Roy: (1995), "Interfuel substitution During Post oil Embargo Period Case Study of Two energy Intensive Manufacturing Industries in India". The Indian Economic Journal, Oct.-Dec. pp.33-46.
- Ganguly, I and Joyashree Roy: (1995), "Oil Demand Elasticities in India", Indian Journal of Applied Economics, Oct.-Dec., Vol. 5, No. 1, pp.75-87.

• Roy Joyashree; (1995), "Allen or Morishima Elasticities? Some empirical Evidence from Indian Manufacturing Industries." Arthavijnana, March, Vol. XXXVII, No. 1, pp 66-76.

1993 (1)

• Roy Joyashree and D. Chakraborty: (1993), "Energy Policy in India - An Over View", The Gulf War and the Energy Crisis in India, Ed. Arun, K. Banerjee, K.P. Bagchi and Co. Calcutta.

1992 (2)

- Banerjee S, T.K. Das, Joyashree Roy, D. Chakraborty (1992), "Population Growth, Energy Utilisation Pattern and Environmental Degradation A Micro Study", Demography India Vol. 21, No. 2, pp.281-290.
- Roy Joyashree: (1992), "Environmental issues and Women A Point of View", Newsletter, Indian Association for Women's Studies.

1990 (1)

 Das, T.K, Joyashree Roy and D. Chakraborty: (1990), "New Technological Options in Energy Sector - cost Burden on Rural Households", Integrated Renewable Energy for Rural Development, Ed. A. Saha, S.K. Saha, M.K. Mukherjee, Tata McGraw Hill Publishing Company Ltd., New Delhi.

1986 (1)

• Kar Joyashree and D. Chakraborty (1986), "Interfuel substitution possibilities in Indian Manufacturing Industries - A Translog Approach", Arthavijnana, Vol 28, No.2, June.

1982 (4)

- Kar Joyashree.(1982), "Towards an Energy Policy for India", Capital, Annual No.
- Kar Joyashree (1982), "Economics of Solar Energy", Capital, Vol. 188/No. 4707, May
- Kar Joyashree.(1982), "Energy Resource Mobilisation in the Manufacturing Sector", Eastern Economist, Vol. 78, No.19, May 14.
- Kar Joyashree (1982), "Energy Dilemma: Economists View Point", Eastern Economist, vol. 76, No.19, May 8.

1981 (1)

Kar Joyashree (1981), "Problems and Prospects of Small Scale and Cottage Industries - A
Case Study with Special Reference to Jaintia Hills District", North Eastern Hill Regions in
India - Problems and Prospects of Development Ed. T. Mathew, Agricole Publishing
Academy. New Delhi.

Select-Research Reports/Conference Proceedings/Working Papers:

(International/National)

 Sathaye, J, Lynn Price, , Earnst Worrel, Michale Ruth, Roberto Schaeffer, Marciao Machaedo Costa, Yanjia Wang, Joyashree Roy, Sarmistha Das, Herald Winkler, Randall Spalding-Fecher , Yaw afrane-Okase , Ogunlade Davidson. (2000) Multi Project Baselines for Evaluation of Energy Efficiency and Power Projects LBNL report No 48242

- Roy Joyashree, Jayant Sathaye, Alan Sanstad, Katja Schumacher (2001), Patterns of Fuel Input Use and Technological Change in India's Energy-Intensive Industries, in Proceedings of the 24th IAEE International Conference, 2001: An Energy Odyssey, held in Houseton, USA.
- Schumacher Katja, Jayant Sathaye, Joyashree Roy, (2001), Productivity Trends and Technological change in Energy Intensive Industries in Brazil, India and South Korea, in Proceedings of the 24th IAEE International Conference, 2001: An Energy Odyssey, held in Houseton, USA.
- Sathaye, J., J. Roy, R. Khaddaria, and S. Das, 2005: Reducing electricity deficit through energy efficiency in India: An evaluation of macroeconomic benefits. LBLN-59092.
 Berkeley, CA, Lawrence Berkeley National Laboratory.
 http://www.iioa.org/conferences/15th/pdf/sathaye_roy.pdf

http://ies.lbl.gov/publications/eliminating-electricity-deficit-through-energy-efficiency-india

- Roy Joyashree, Anupa Ghosh, Gopa Barua (2006), The Economics of Climate Change,
 A Review of Studies in south Asia with special reference to India. Submitted to Stern
 Review on the economics of climate change. http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm
- Roy Joyashree, Bikram Chatterjee and Sruti Basak (2007), Towards a Composite Sustainability Index: How are the States and Union Territories of India doing?
 Working papers series of Global Change Programme, Jadavpur university, GGCP-JU /2007/EXC-1.
- Roy Joyashree, Moumita Roy, et al. (2009)Climate responsible Lifestyle Initiative @ Raj Bhavan Kolkata.
- Roy, J., Roy, B., Dasgupta S. and D. Chakravarty. (2011). Business Model to Promote Energy Efficiency: Use of Electrical Appliances in Domestic Sector in West Bengal: A Baseline Study, submitted to Energy Conservation and Commercialization Project, Phase III (ECO III), contract no 386-C-00-06-00153-00 by Global Change Programme, Jadavpur University, Kolkata, India. http://eco3.org/wp-content/plugins/downloads-manager/upload/Report-1038-Bussiness%20Model%20for%20REEC.pdf
- Ghosh, D., and J. Roy. Approach to energy efficiency among micro, small and medium enterprises in India: Results of a field survey. Working Paper 08/11, UNIDO, 2011.
- Support to the National Water Mission-NAPCC http://www.adb.org/Documents/Produced-under-TA/43169/43169-012-ind-dpta-04.pdf

- Roy Joyashree, D.Ghosh, A. Ghosh, S. Dasgupta and D. Chakravarty (2012), Approaches towards Mitigation and Adaptation with special reference to India's NAPCC and Various Financing Instruments. Submitted to Department of Finance, Government of India, Contract no A 48011/19/2011dt 12.1.2012. by Global Change Programme, Jadavpur University, Kolkata, India.
- Chakraborty, D., **Roy**, J.(2012). "Climate Change Adaptation and Mitigation Strategies: Responses from Select Indian Energy Intensive Industrial Units". *In the Proceedings of International Conference on Public Policy and Governance* 2012, *Vol.I.*, jointly organized by the Department of Management Studies, Indian Institute of Science, Bangalore and Public Affairs Centre, Bangalore.
- Guha Indrila, Roy Chandan, Banerji Rajarshi, **Roy Joyashree**, Bhattacharya Somnath (2012), *Adaptation in case of Inundation of Islands: An Exploratory Study from Indian Sundarbans*, Mukhopadhyay.A and Ghosh.S.N.(edited), Climate Security: Perceptions, Challenges and Beyond, UGC Academic Staff College, University of Calcutta.
- Chhetri Netra, Jason Lloyd, Ted Nordhaus, Roger Pielke jr., Joyashree Roy, Daniel Sarewitz, Michael Shellenberger, Peter Teague, Alex Trembath (2016), Adaptation for a High Energy Planet, Break through Institute.

Research Guidance:

Ph.D. Thesis - (completed) All are sole supervision unless mentioned in parenthesis.

- 1. Analysing Economic Structures With Special Reference to Indian Economy by Santadas Ghosh.
- 2. A Study on Infrastructure Economy Interdependence in India: An Input-Output Approach by Ranjana Mukherjee ,nee, Chatterjee.
- 3. Climate Change Policies: Challenges for the Indian Industries by Sarmistha Das.
- 4. Understanding Changes in Energy Use and CO₂ Emissions from Manufacturing Industries in India by Mitali Das Gupta.
- 5. Energy Consumption Pattern in Bangladesh by Subrata Bain [Joint supervision with one other JU-Economics Faculty Teacher]
- 6. Analysis of Oil Demand in India by Indrani Ganguly
- 7. Pollution from Paper Industry in India by Sebak Jana [Joint supervision, with one other Engineering faculty –JU teacher]
- 8. Sustainability, Water Use, Economic Incentives: Case of Greater Calcutta by Monojit Ghosh.

- 9. Small and Medium Enterprises in India: An Analysis of Funding risks, risk mitigation and sustainable development by Duke Ghosh [joint Supervision with IIM –Joka professor]
- 10. Extreme Climatic Events: An Analysis of Socio Economic Vulnerability and Coping Mechanism in Selected Hotspots in India by Anupa Ghosh [joint supervision with Engineering faculty –JU teacher]
- 11. Accounting for Air and Water Resources: Case Study of West Bengal by Maniparna Shyam Roy.
- 12. Economic Analysis of Arsenic In water: Case of West Bengal by Abhijit Das
- 13. Performance Evaluation of the Indian Industries and Environmental Management Practices by Debrupa Chakraborty.
- 14. Impact of Green House Gas Emissions on Indian Economy A SAM Based CGE Modelling Approach by Barun Deb Pal [Joint Supervision with Delhi Based Institute's faculties].
- 15. Lifestyle and Climate Change: An Empirical Study with Special Reference to India by Shamik Pal
- 16. Response of Indian Industries to Sustainability Goals: An Economic Analysis with Special Reference to NAPCC by Shyamasree Dasgupta
- 17. Rebound Effect: Empirical Evidence from the Indian Economy by Debalina Chakraborty
- 18. Climate Change, Heat Stress and Labour Productivity-An Economic Analysis by Kuheli Mukhopadhyay

In Progress

- Coastal Ecosystem Services and Economic Activities: Understanding Interconnectedness Through a Case Study (Satabdi Datta)
- 2. Low Carbon Development: Alternative Pathways and Financing Mechanisms (Nandini Das)

M. Phil Dissertation

- 1. Oil Demand Elasticities in India by Indrani Ganguly. 1993.
- 2. Interfuel Substitution in Selected Indian Manufacturing Industries during Post Oil Embargo Period by Sarbari Sarkar 1993.
- 3. The Residential Consumption Pattern for Energy in Urban Sector- A case Study of Calcutta Using Consumer Expenditure Survey data, by Soma Dey, 1994.
- 4. Power A Study on Decentralised Generation using Survey Data", by Soma Gupta, 1994.

- 5. Inequality in Primary School Participation Indian Experience by Smritikana Majumdar, 1995
- 6. An Analysis of Private Demand for Elementary Education Using Household Survey Data, by Shyamal Banerjee, 1995.
- 7. Participation at Primary level of Education an Empirical Study for West Bengal using District Level Data by Nupa Mukhopadhyay, 1996.
- 8. Environmental Concern and Abatement Policies in India an Evaluation through Endof-pipe treatment cost analysis for Indian Paper Industry by Subhadra Ganguly, 1996.
- 9. Energy Use and CO₂ Emissions: Case of Indian Manufacturing Industries by Mitali Dasgupta, 1999.
- 10. Understanding Energy and emissions intensity in India: by Chetana Chaudhuri 2008
- 11. Coastal Inundation and Adaptation Strategy in Indian Sundarbans: A Case Study of Sagar Island.: Chandan Roy 2009.
- 12. Understanding Productivity Growth and Climate Change Mitigation Potential of Iron and Steel Industries in India . Shyamasree Dasgupta 2010
- 13. Determination of the Economic Value of Water in Irrigated Agriculture: a Micro Economic Analysis of Blue accounts in the context of Nepal, Jit Prasad Acharayya 2010
- 14. Role of Nepalese Forest at Global ContextRaghubir Bista, 2010
- 15. Energy Efficiency, Rebound Effect and Energy Savings Potential: Case of West Bengal by Debalina Chakrabarty 2011
- 16. Heat stress and Workability, Case study of Street Hawkers of Kolkata, Shalini Mitra 2011
- 17. Mitigation: What can West Bengal's Energy Intensive Manfacturing Industries Do?, Gopa Ghosh 2012
- 18. Climate Change and Food Security: Issues, Challenges and Opportunities, Amrita Bhanja 2012

RESEARCH PROJECTS/CONSULTANCY/CAPACITY BUILDING PROGRAMMES UNDERTAKEN: SPONSORED BY INTERNATIONAL AND NATIONAL AGENCIES (Illustrates Capability to Handle Various Tasks Independently/jointly):

2014-16

Commercializing a scalable low-cost arsenic remediation technology for societal impact,
 IUSSTF

2014

• Environmental Fiscal Reform: International Experiences and Relevance for India: target group: Policy makers from various government departments in India. Funded by Ministry of Environment, Forest and Climate Change and Centre of Excellence in Madras School of Economics.

2013-14

- Coastal Ecosystem and Changing Economic Activities: Challenges for Sustainability Transition along Chinese and South Asian Coasts. : APN (three country project)
- INDGLOB project, with Centre for International Climate and Environmental Research, Oslo.
- Study of KMC installations for making them most energy, carbon and economically efficient and formulation of recommendations: Kolkata Municipal Corporation.

2013-15

• Multi level Governance in climate change: ICSSR, DFG, NOW

2013

 Ecosystem Services: Theory and Practice. Capacity building programme for advanced research scholars and young professionals funded by TIFAC. Depart of Science and Technology, GOI.

2012-13

- The Economics of a Low Carbon Kolkata (Mini-stern)' [a part of 'Ten Climate Smart City Programme: Centre for Low Carbon Futures UK.
- Climate change, heat stress and Human productivity: UGC-UPEII
- Coastal Ecosystem and Changing Economic Activities: Challenges for Sustainability Transition along Chinese and South Asian Coasts. : APN (four country project)

2012

- Fiscal Instruments for Low Carbon Growth in West Bengal and Odissa, India: *UKFCO/BHC*
- Climate mitigation, adaptation strategy for South Asia: *ADB*

2011-2013

• Experimenting for Sustainability in India and Thailand: A Transition Perspective on Sustainable Electricity and Mobility Initiatives: WOTRO-NWO

2010

- Role of Experiments in Sustainability Transition in Asia: *APN*
- Business Model to Promote Energy Efficiency: Electrical Appliances in Domestic Sector in West Bengal: USAID

2009-2010

• Energy Scenario Assessment: *LBNL*

2007

• Trade and Climate Change: Case of Small Developing countries: *ICTSD*

2006

- CGE Modelling for Indian Economy for Climate Policy for India: MOEF-GoI
- Sustainability Indicators and Analysis for Indian Indian Economy: UGC

2003

• Natural Resource accounting for West Bengal: Water and air sector: MOSPI-GoI

1998-2003

• Nodal Person at Jadavpur University of the Environmental Economics Programme under the World Bank aided India Environmental Economics Capacity Building Programme for group of institution: *MOEF,GoI*.

2000-2002

• Climate Change Policies: Implications for Indian Industries: LBNL

2000

- Energy Indicator Analysis for India: IEA
- Socio-Economic Evaluation of the Gosaba Gasifier Plant: WBREDA, GoWB

1999

- Empirical Support for Integrated Assessment Modellers for Developing Economies: *LBNL*
- Decentralised Power Generation- An Analysis of Cost and Scope for Renewables in, India: WBREDA, GoWB

1995

• Solar Lanterns and Other New Technologies in Rural Areas- An Evaluation of Performance, market and Entrepreneurial Potential: *WBREDA*, *GoWB*.

1994

• Cost Benefit Analysis of the Solar heating Systems in Khardah Jute Mill and Solar Cookers under Operation in Different Parts of Kolkata: WBREDA, GoWB

1992

- Cost Competitiveness of the Supplementary Power Generating System in Kolkata city: UGC
- Integrated Rural Energy Programme for Gorubathan Block, West Bengal: WBREDA, GoWB

OVERSEAS TRAVEL for research collaboration/Post doctoral research/short term advanced course participation/ research assignments/ conference/meeting/workshop/Key note addresses/Invited lectures:

Year	Country	Institute./city	Purpose	
		Lawrence Berkeley National	Post Doctoral fellow	
	USA	Laboratory, California	1 ost Doctoral lellow	
1997		New York University	Paper presenter, I-O Conference	
	Canada	Quebeck city	Paper presenter, IAEE	
			Conference	
1998	USA	Lawrence Berkeley National	Post Doctoral fellow	
		Laboratory, California		
1999	USA	Lawrence Berkeley National	Invited Visiting Researcher	

		Laboratory, California		
2000	USA	Lawrence Berkeley National Laboratory, California	Invited Visiting Researcher	
	Italy	Macerata University	Session Chair, Paper presenter, I-O conference	
	France	International Energy Agency, Paris	Invited Visiting Researcher	
	Netherlands	Hague	Group Research presentation, COP6 of UNFCCC	
	Switzerland	Zurich Institute of technology	Invited speaker	
	Nepal	Kathamandu	Paper presenter, SANDEE conference	
2001	USA	Lawrence Berkeley National Laboratory, California	Invited Visiting Researcher	
	Netherlands	Amsterdam	Invited speaker-Kyoto Network conference	
2002	USA	Lawrence Berkeley National Laboratory, California	Invited Visiting Researcher	
	Thailand	Asian Institute of Technology, Bangkok	Paper presenter, SANDEE conference	
	Bangladesh	Dhaka	Research group presentation - APN conference	
	Bangladesh	Dhaka	Paper presenter, SANDEE conference	
	Canada	Montreal	Session organizer, Chair, paper presenter, I-O conference	
2003	USA	Lawrence Berkeley National Laboratory, California	Invited Visiting Researcher	
		Sandiego State University	Invited speaker-APN workshop	
	Nepal	Kathmandu	Invited speaker-APN workshop	
	SriLanka	Colombo	Paper presenter, SANDEE conference	
	Bangladesh	Dhaka	Resource Person - SANDEE research & training (R&T) workshop	
	T1 :1 1	Asian Institute of	Advanced Course participant-	
	Thailand	Technology	SANDEE conference	
2004	USA	Lawrence Berkeley National Laboratory, California	Invited Visiting Researcher	
	00/1	Howard University, Washington DC	Invited Collaboration meeting	

	Nepal	Kathamandu	Resource person-SANDEE R&T workshop	
	France	CERNA, Ecole de mines, Paris	Invited speaker in DEMATEEDE research collaboration	
	UK	Natural Research Institute, Kent	Invited speaker, Research collaboration	
	Japan	Tokyo	IPCC -CLA of AR4 meeting	
	Germany	Leipzig	IPCC-CLA of AR4 meeting	
2005	USA	Washington, DC	IPCC -CLA of AR4 meeting	
	Peru	Lima	IPCC -CLA of AR4 meeting	
	Philippines	Manila	Invited speaker-SYLFF-TKFD meeting	
	Bangkok	ChiangMai	Invited speaker, APN workshop	
	Ghana	Accra	Invited speaker-DFID Project meeting	
		Colombo	Invited speaker-APN, START workshop	
	Srilanka	Tea Research Institute	Invite spaker-Research collaboration	
	Zambia	Lusaka	Project partner -DFID Project meeting	
2006	South Africa	Capetown	IPCC -CLA of AR4 meeting	
	China	Beijing	IPCC -CLA of AR4 meeting	
		Osaka , St Andrews University	Invited lecture	
	Japan	Tokyo	Invited speaker and session chair-World Bank Annual Conference for Development	
	UK	London, HM Treasury	Invited in Stern review Committee Meeting	
		NRI, Chatham	Invited lecture and Meeting with Project collaborators	
	USA	New York University	Paper Presentation at North American Productivity Conference	
	France	Paris	IPCC Meeting	
	Singapore	Lin Qua School of Public Policy	Invited to World Bank and IMF meeting and Workshop by RAD	
	Russia Leontief Centre		Invited Lecture in Centenary celebration	
			IPCC -CLA of AR4 meeting	

2007	Denmark	Copenhagen	SYLFF Directors Meeting	
	Thailand	Bangkok	IPCC-AR 4 Approval session	
	C1 ·	D1 1	Invited reviewer, chair, jury,	
	Slovenia	Bled	World Bank ABCDE Conference	
	C	D 1	Invited observer at SYLFF	
	Germany	Bochum	Regional Forum	
	M-11:	N4-1-	APN-project Inception	
	Maldives	Male	Workshop	
	Courtle Africa	Complexion	Invited speaker IPCC-AR4	
	South Africa	Capetown	dissemination workshop	
2008		Bangkok	SANDEE Workshop	
	Thailand	Chiana Mai	Invited participant-Workshop,	
		Chiang Mai	Sustainability Transition	
		Tilberg	Ph. D thesis examination	
	NT (1 1 1	IDCC TCLI	Invited Seminar on "climate	
	Netherlands	IPCC TSU	change and Indian economy"	
		Utrecht University	-Do-	
	T	Т-1	IPCC -AR4 Dissemination	
	Japan	Tokyo	workshop	
	A		Global Energy Assessment	
	Austria	Vienna	workshop of IIASA	
	South Africa	Capetown	Jury member-ABCDE World	
			Bank	
	Spain	Seville	Key note paper- International	
			Input-Output Conference	
	Philippines	Manila	Invited speaker- Climate change:	
			media training workshop by	
			EEPSEA	
	Switzerland	Geneva	Invited -UNEP-ADAM	
			workshop on trade and climate	
			change	
	Austria	Vienna	Workshop -GEA	
	France	Paris	Invited for consultation-World	
	Trance	1 alls	Bank Vice Presidency	
			Invited speaker-World Bank	
	Netherlands	Hague	Climate Change and	
			Development	
	Germany	Berlin	Invited for brain storming-World	
			bank workshop on World	
			Development Report	
	UK	Cambridge	Project leaders meeting of	
-			Climate strategy	
	France	Paris	World Bank meeting on Low	

			Carbon Pathway	
2009		7.71	Global Energy Assessment	
	Austria	Vienna	Council Meeting.	
	- 1		Invited Panelist in Climate	
	Denmark	Copenhagen	change congress	
	_	0.1	Invited lecture series-	
	Japan	Osaka	Momoyama Gakuin University	
	Canada	Toronto	Invited Lecture-York University	
	Austria	Vienna	Executive committee meeting	
	C	D =	Session chair and paper	
	Germany	Bonn	presenter-IHDP Meeting	
	Mexico	Curnavaca	GRUNHE Network Meeting	
	Lauran	Osaka	Invited- Momoyama Gakuin	
	Japan	Osaka	University	
	UK	London	Invited participant-ESRC	
	UK	London	Meeting in LSE	
	Konya	Najrobi	GRUNHE / ICUH Conference	
	Kenya	Nairobi	2009	
	Austria	Vienna	GEA ExComm meeting	
2010	Netherlands France	Groningen	Invited Public lecture on Indian	
			Economy, Groningen university,	
			School of Economics and	
			Business	
		Utrecht University	do	
		Paris	Meeting at World Bank Vice	
			Presidency	
	Italy	Milan	GRUNHE meeting	
	Switzerland	Zurich	ETH -invited lecture	
	Austria	Vienna	GEA Ex-Committee Meeting	
	Sweden	Stockholm	Chair and Jury Board member-	
	Sweden		ABCDE world bank	
	UK	Cambridge	Invited Visiting Scholar at	
	OK		Faculty of Economics	
	USA	LBNL, California	Invited Visiting researcher	
	Belgium	Liege	IPCC meeting	
	Japan	Beppu	Invited speaker-TKFD meeting	
	Nepal	Kathmandu	Invited paper-SANDEE-	
	_	conference		
2011	Malayasia	Kualulumpur	APN meeting	
	Germany	Hamburg	LOICZ steering committee	
			meeting	
	Austria	Vienna	Executive council meeting- GEA	

Bangladesh	Dhaka	Invited paper-Workshop on
		Water resource
China	Beijing	Invited to IEA meeting on WEO
Thailand	Bangkok	Invited participant -SANDEE
	zungnen	Policy workshop
Australia		Invited lecture-Monash
	Melbourne	University-Monash
		Sustainability Institute
		Invited lecture, session
China	Yantai	organization and chair LOICZ-
		OSC, YLF
Bangladoch	Tangail	Resource person-SANDEE-
Dangiauesn	Tangan	capacity building programme
China	Yixing	Invited paper-SCOPE
D '	14	Invited Paper-Climate change
Russia	Moscow	adaptation (GOI)
NT (1 1 1	1	Invited participant-Climate-
Netherlands	Amsterdam	Nitrogen
New Zealand	Wellington	IPCC meeting
THE	T 1	Paper presenter-Planet Under
UK	London	Pressure Paper presentation
USA	Washington DC	IPCC meeting
	Islamabad	Invited speaker-SDPI and
Pakistan		SANDEE -capacity building
		programme
China	Taiyuan	Paper presentation-
		Environmental Development
Spain	Vigo	IPCC lead authors' Meeting
361	TC 1.1	Invited member in brainstorming
Malayasia	Kualulumpur	-Future Earth-regional Vision
		Paper presenter an special
	Eindhoven	seminar speaker-Workshops: on
Netherlands		Mobility and Bio fuel
		Transitions, Eindhoven
		University
USA		Invited participant-Workshop:
	Washington DC	Energy access, Arizona State
		University
Germany	Berlin	IPCC special meeting
USA		Invited chapter author-GEA
	California	Launch by Stanford University.
0011		ECAR and DIL executive
	China Bangladesh China Russia Netherlands New Zealand UK USA Pakistan China Spain Malayasia Netherlands USA Searmany	China Beijing Thailand Bangkok Australia Melbourne China Yantai Bangladesh Tangail China Yixing Russia Moscow Netherlands Amsterdam New Zealand Wellington UK London USA Washington DC Pakistan Islamabad China Taiyuan Spain Vigo Malayasia Kualulumpur Netherlands Eindhoven USA Washington DC Germany Berlin

			LBNL, Berkeley	
	TICA	California	Invited participant-Breakthrough	
	USA	California	Institute Annual Conference	
	Ethiopia	Addis Ababa	IPCC AR5 meeting	
	т	Yokohama	Invited speaker-LoCAR net	
	Japan		annual conference	
	Brazil	Rio de Jenerio	LOICZ SSC meeting	
	Sweden	Stockholm	UNEP -Gap report meeting	
	USA	New York	UCCRN Inception meeting	
	Germany	Potsdam	IPCC meeting: SPM/TS	
	-		Invited speaker-International	
	0 4 76		Conference on Climate Change	
	South Korea	Seoul	Policy Coordination and Policy	
			Mix	
	NT -1 1 1	E: 11	Invited speaker-Role of climate	
	Netherlands	Eindhoven	models workshop	
2014	C 1	3.6 . 1	Invited participant-CIFAR Life in	
	Canada	Montreal	Changing Ocean Meeting	
	C (1 AC:		Invited speaker-Development	
	South Africa	Capetown	and Mitigation forum	
	Srilanka	Colombo	Invited speaker-South Asian	
			Meet on Higher education of	
			British Council	
	Thailand	Pattaya	Invited paper presenter, session	
			chair- ICUE 2014	
	Germany	Berlin	IPCC AR 5 approval session	
			Multi level governance network	
			meeting	
	Thailand	Chiang Mai	WOTRO Network Workshop	
	Germany	Bonn	Invited speaker-UNFCC-SED	
	TICA	California	Key note address-Breakthrough	
	USA	California	Dialogue	
	Dalvistan	Islamabad	Invited speaker-IPCC AR 5	
	Pakistan		dissemination workshop	
	II 1.	V1-	Invited -IPCC AR5 dissemination	
	Uganda	Kampala	workshop	
	C	D-1-1	Invited Paper -Multi level	
	Germany	Potsdam	Governance Dialogue	
	Thailand	Bangkok	CGIAR-CCAFS workshop	
	T 1- '	Yojgyakarta	Invited speaker -IPCC AR 5	
	Indonesia		dissemination workshop	
	Netherlands	Amsterdam	Project partner Multilevel	
			governance workshop	

2015	Sri lanka	Gaulle	APN project workshop	
			Invited paper at Regional Forum on	
			Climate Change (RFCC) - Low	
	Thailand	Bangkok	Carbon and Climate Resilient	
			Societies: Bridging Science,	
			Practice, and Policy	
	Germany	Potsdam	Invited speaker at IASS	
	USA	California	Invited speaker at Breakthrough	
	03/1	Camorna	Dialogue	
	Norway	Stavanger	Indo-Norway Project meeting	
	Pakistan	Lahore	IPCC dissemination meeting	
2016	Nonel	Kathmandu	ICIMOD-HIMAP writeshop for	
	Nepal	Katimanuu	authors	
			IPCC AR6 media and workshop	
	Nomerous	Oslo	on How to communicate Climate	
	Norway	Osio	Change Related scientific	
			messages to public	
			Invited lecture at PRIO-Climate	
	Norway	Oslo	Governance, Case study of India	
	,		: Multilayered Complexities	
	Belgium	Ghent	TEDx talk	
	USA	California	Breakthrough Dialogue 2016	
	NT 1	IV d	HIMAP, authors meeting, co-	
	Nepal	Kathmandu	chair of scenario session	
			IPCC meeting -invited lecture on	
	Switzerland	Canana	social transition 1.5 Degree	
	Switzeriand	Geneva	world and session co-chair on	
			Implementations	
	D ·	C. D 1	EMEICS -Invited Lecture on	
	Russia	St Petersburg	Coastal risks and adaptation	
			Future-Earth and IPCC meeting	
	C 1	Stockholm	on Sustainable development,	
	Sweden			
i .	Sweden	Stockholm	Invited session co-chair on	
	Sweden	Stockholm	_	
	Sweden	Stockholm	Invited session co-chair on Solutions	
			Invited session co-chair on Solutions IGES meeting on Low carbon	
	Germany	Wuppertal	Invited session co-chair on Solutions IGES meeting on Low carbon network, chair and invited	
			Invited session co-chair on Solutions IGES meeting on Low carbon	
	Germany	Wuppertal	Invited session co-chair on Solutions IGES meeting on Low carbon network, chair and invited lecture on deep de-carbonisation in Indian industries	
			Invited session co-chair on Solutions IGES meeting on Low carbon network, chair and invited lecture on deep de-carbonisation in Indian industries Invited speaker on possible	
	Germany	Wuppertal	Invited session co-chair on Solutions IGES meeting on Low carbon network, chair and invited lecture on deep de-carbonisation in Indian industries	

RESEARCH EXPERIENCE AND CURRENT RESEARCH INTEREST: (Since 1980-)

Broad area of research is Resource and Environmental Economics. Major contributions are in the field of Energy demand modeling. The field of application ranges from Non renewables to Renewable resources, urban to rural problems. The bias is more towards industry sector and econometric model building, statistical analysis especially for deriving policy implication for developing countries with special reference to the Indian economy. Data base ranging from primary data from field survey to secondary data and macro data such as input-output tables have been used at various stages of research and publications. Focus of current research is more towards Economic and Social Dimensions of Climate Change, Water resource management and multidisciplinary research on sustainable development, social embedding of new innovation.

LANGUAGE & DEGREE OF PROFICIENCY

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Hindi	Excellent	Excellent	Excellent
Bengali	Excellent	Excellent	Excellent
Assamese	Excellent	Excellent	Excellent

In You Tube/podcast/news papers/online media

- http://www.youtube.com/watch?v=YhJ_Q-_uuK4
- http://studium.webhosting.rug.nl/images/stories/archief_archief_geluidsbestanden/2010/voorjaar/EconomiesRoy.mp3
- http://thebreakthrough.org/index.php/programs/energy-and-climate/understanding-energy-efficiency-rebound-interview-with-joyashree-roy/
- http://vimeo.com/75470291
- http://indiaclimatedialogue.net/2014/08/29/indian-industries-bit-go-green/
- https://www.youtube.com/watch?v=tFZhqv3Egvo
- http://social.yourstory.com/2016/03/engineers-water-filter-arsenic/
- http://www.business-standard.com/article/pti-stories/engineers-develop-water-filter-to-remove-arsenic-116032500287 1.html
- http://www.tedxghent.be/home/events/tedxghent-6-bits-love/ (https://www.youtube.com/watch?v=EQ56sFXpHb8)